associated with DPT1-3 dropout in Kabarole District.

Methods: A cross sectional study using cluster sampling was employed. Two clusters at parish level (rural and urban) each from a county in the district were selected by simple random sampling and all villages therein were studied. A total of 230 children (115 from either cluster) were recruited and their parent or guardian interviewed. Cross-tabulations and chi-square tests were used to determine the strength of associations between independent variables and the outcome. Binary logistic regression was done to adjust for potential confounders and identify independent predictors. Key informant interviews were held with in-charges of health units. Qualitative data was analysed manually using thematic approach and results presented in the form of text.

Results: Factors found to be associated with DPT1-3 dropout were; lack of caretaker knowledge about DPT dosage, (adj. OR = 8.2; 95% CI: 3.12, 21.53); Child's Birth Order, 6th and above (adj. OR = 3.0; 95% CI: 0.80, 11.05); Child Birth Order 2-3 (adj. OR = 2.2; 95% CI: 0.70, 6.71); Child age group 31-36 compared to 12-18 (adj. OR = 2.5; 95% CI: 0.81, 7.84). However, Rural residence (OR = 1.2; 95% CI: 0.56, 2.57); and Child without immunisation card (OR = 4.4; 95% CI: 0.35, 39.86) were not significantly associated with DPT dropout.

Conclusion: The current DPT1-3 dropout prevalence in Kabarole is still high but dropping (13.7%). DPT 1-3 dropout is associated with caretaker lack of knowledge of number of dosages a child should receive and involvement of religious leaders, long travel distance to point of accessing transport means, and convenient time for immunisation. Findings from this study can be used to improve DPT immunisation services. Specific campaigns on DPT immunisation through home visits, involving community leaders and full day immunisation can help further reduce the dropout rate.

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83.024

Antibody persistence 10 years after 1st and 2nd doses of 23-valent pneumococcal polysaccharide vaccine (PN23), and immunogenicity and safety of 2nd and 3rd doses in older adults

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Background: In a clinical trial in ambulatory older adults, 1st and 2nd PN23 doses induced significant increases in IgG antibody and were generally well tolerated. We re-enrolled trial participants to study 10-year antibody persistence following the earlier doses, and immunogenicity and safety of 2nd or 3rd PN23 doses.

Methods: Ten years after receiving a 1st or 2nd PN23 dose, 143 trial participants (age 60-93 years, median 77) were re-enrolled and revaccinated (2nd dose n = 72, 3rd dose n = 71). Sera obtained before and 30 days postvaccination experiences (AEs) through 14 days postvaccination. Serious AEs were monitored through 30 days postvaccination.

Results: Ten years postvaccination, geometric mean concentrations (GMCs) in 1st- and 2nddose recipients remained higher than prevaccination GMCs in 1st-dose subjects (when they were vaccine-naive) for all but serotype 3. Second and 3rd doses induced significant increases in GMCs for 8 and 6 serotypes, respectively; GMCs for all 8 serotypes increased in participants < and ''75 years old. Frequencies of injection-site and systemic AEs were lower after the 2nd than the 3rd dose. Among 3rd-dose recipients, injection-site pain, swelling, and redness were reported by 75%, 39%, and 30%, respectively, while fatigue, body aches, and headache were reported by 38%, 34%, and 25%, respectively. Fever (oral temperature ''100 °F [37.8 °C]) occurred in 0% and 6% of 2nd- and 3rd-dose recipients, respectively; the maximum reported temperature was 100.2 °F (37.9 °C). AEs after either dose were generally mild, and > 90% resolved within 1 week. No vaccine-related serious AEs were reported.

Conclusion: Although protective levels have not been established for adults, antipneumococcal antibody is known to protect against pneumococcal disease. In ambulatory older adults, 1st and 2nd PN23 doses induced IgG antibody to vaccine serotypes which still exceeded vaccine-naive levels after 10 years. Moreover, 2nd and 3rd doses administered 10 years after the previous dose were immunogenic and generally well tolerated in those < and ''75 years old. These findings are consistent with a beneficial effect of 1st, 2nd, and 3rd PN23 doses.

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83.025

Public health approach after detection of an iVDPV case in Argentina

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Background: Argentine has been polio free since 1984 and has a sustained and active surveillance of the acute flaccid paralysis (AFP) that involves an epidemiology and laboratory approach, reaching all the PAHO indicators. In this context we describe the emergence of a case of AFP due to an VDPV in a 15-months old boy with polyclonal agammaglobulinemia.

Methods: The case was notified to the National Program, and a stool sample and a throat swab were sent to the Regional Reference Center for Polio Diagnosis. Samples were inoculated in Rd and L20B cells following the new algorithm recommended by WHO. In less than 2 days a virus was isolated in both samples which were characterized as a polio type 1. They were sequenced in the VP1 region, 5ĭNCR. As a result we found a 3,7% (stool sample) and 3,5% (throat

swab) nucleotide difference in VP1 compared with the Sabin strain. These results confirm the presence of an iVDPV1. The sequences of 5ĭNCR showed the 480 nucleotide change, proving the reversion of the sabin strain to the infectivity. These findings were sent to the National Program in less than 15 days.

Results: After the detection of AFP notification was sent to the field, Epidemiology actions were made as in all cases. In the investigation three different locations were established as the child residence. All of them were visited and vaccination of all children under 18 years old was done. A national and international alert were sent Active community surveillance was made and contact and environmental samples were collected and sent to the Regional Lab. In none of them the iVDPV 1 was detected. Four serial samples from the case were taken each month, in all of them the same iVDPV1 was isolated.

Conclusion: The country has sustained the surveillance of AFP through 22 years based on the collaborative work between the laboratory and the epidemiologists. No other cases appeared although the vaccine coverage in one of the district was very low. As consequence of this finding a national vaccination campaign was made. Although poliomyelitis is a threat to the region Argentine is ready to face it.

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83.026

Yellow fever vaccine (YFV) and events supposedly attributable to vaccination or immunization (ESAVIs): Argentina's experience

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Background: The acronym ESAVI defines any clinical picture after vaccination chronologically related to its use. Further analysis of the event determines the role of the vaccine in its causality. In the case of YFV, three categories of severe adverse events are described: anaphylactic reactions, YF neurotropic disease (YFV-AND), viscerotropic disease (YFV-AVD). YFV is included in Argentinaĭs national immunization program for use in population older than one year of age in regions with transmission risk. It is also prescribed to travelers to endemic zones and can be required upon International Health Regulation allowance. We describe the clinical, epidemiological and laboratory profile of ESAVIs in the context of an extraordinarily increased YFV administration in Argentina in 2008, due to reported fatal cases involving humans and monkeys in risk zones.

Methods: This is a descriptive study encompassing the period between January and December, 2008. Complete YFV-ESAVI forms were included, after the expert committee evaluations. Adverse events were grouped using current PAHO/WHO classification. Samples (serum, CSF and liver biopsies) were processed at the INEVH through standard techniques.

Vaccine shots: 1,806,400.

Results: Fifty ESAVIs were included:

Classification	Mild-Moderate	Severe
1	12	2
2[a]	-	-
2b	23	9
3	-	1

The 2b severe ESAVIs consisted of eight YFV-AND and one YFV-VD, whereas the two severe type 1 ESAVIs consisted of one urinary sepsis and a sepsis-like case without final diagnosis. The type 3 ESAVI was an ADEM.

Neither reactions nor programmatic errors were reported.

YFV-VD rate was 0.5/1.000.000 doses; YFV-AND 4.4/1.000.000 doses No particular vaccine lot was related to ESAVIs. Global incidence of ESAVIs coincides with the heretofore published data. However, some of the authors knew of more clinically compatible YFV-AND and VD non-studied cases, and there is strong suspicion of underreporting.

Conclusion: An accurate surveillance system and a reference laboratory are fundamental for ESAVIs study. Detailed reports for valid conclusions and opportune actions, plus a multidisciplinary work for rigorous analysis is needed. A carefully managed risk-benefit balance when prescribing YFV alongside with updated epidemiological information for accurate guidance is critical.

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83.027

Genetic characterization of *Mycobacterium bovis* BCG Mexico 1931

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Background: BCG vaccine is the only preventive measure against tuberculosis. At least two genomes from BCG, Pasteur and Japan, have been described. Evolutionary schemes establish by DU2 and other markers situated BCG Japan and Pasteur into group I and IV from genealogy of BCG vaccines, respectively, classified as early and late strains. Some BCG such as Mexico 1931 is not included in any comparative studies based on phenotypic, genotyping, immune response